

Wisconsin Farm-Related Fatalities 1996-2005

Mark. A. Purschwitz¹ and Tammy M. Ellis¹, National Farm Medicine Center, Marshfield Clinic Research Foundation, Marshfield WI

According to published annual farm-related fatality summaries from the University of Wisconsin Center for Agricultural Safety and Health (WISCASH), 308 fatalities related to farm work or work site hazards occurred in Wisconsin in the 10-year period of 1996-2005, for an annual average of approximately 31 fatalities per year. This is a compilation of those 10 annual summaries.

The estimated Wisconsin farm fatality rate (number of fatalities per 100,000 workers) for the 10-year period was approximately 34, based on an estimated total of 894,000 worker-years in production agriculture in Wisconsin over the 10 year period, including farm operators, unpaid family labor, and hired workers, but excluding service workers hired through agricultural labor contractors. (Note: The estimated number of workers was the sum of the estimated number of workers for each of the 10 years as reported by WISCASH. For the years 1996-2001, WISCASH estimates were based on the quarterly totals reported by the National Agricultural Statistics Service [NASS]. Because NASS stopped collecting these data after 2001, WISCASH used linear regression to calculate estimates for the years 2002-2005 based on 1996-2001.)

Fatalities	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Number	35	41	29	26	32	29	24	37	25	30	308
Rate*	31	39	28	27	35	33	29	48	35	45	34

*** (per 100,000 workers)**

According to the National Safety Council, agriculture is consistently one of the two most hazardous industries in the U.S. (mining is the other), and had an estimated 7334 work deaths during 1996-2005 and a fatality rate of 29.2 deaths per 100,000 workers. This compares with 50,005 fatalities for all U.S. industries combined, with a death rate of 3.7 per 100,000.

Farm-Related Fatality Definition

Farm-related fatalities are defined as unintentional deaths resulting from injury or environmental factors involving farm work or hazards of the farm work site. Fatalities resulting from heart attacks, recreational activities, home-related activities, or most motor vehicle injuries, are not included in this definition.

Types of Farm-Related Fatalities

Incidents involving tractors or other farm machinery were the most common, accounting for almost two-thirds of the 308 fatalities (193 fatalities, 62.7% of the total). Farm tractors were involved in 113 (36.7%) of the 308 fatalities, while other farm machines were involved in 80 fatalities (26.0%). Animal-related incidents ranked third on the list, accounting for 37 fatalities (12.0%); falls accounted for 26 (8.4%); confined space (grain or feed bins, manure storages) accounted for 14 (4.5%); trucks/vehicles (non-tractor) accounted for four (1.3%); and the remaining 34 deaths (11.0%) were in the "Other" category. Examples of those incidents include electrocution, trench collapse, falling object, fire, drowning, etc.

Fatalities	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
Tractors	12	11	15	13	11	11	7	10	7	16	113
Farm Machines	11	10	8	7	12	5	7	12	5	3	80
Animals	3	7	1	1	6	1	2	5	7	4	37
Falls	4	6	1	0	0	5	0	4	3	3	26
Confined Spaces	2	2	2	1	0	1	2	0	2	2	14
Trucks/Vehicles	0	1	0	0	1	1	0	0	0	1	4
Other	3	4	2	4	2	5	6	6	1	1	34
Total	35	41	29	26	32	29	24	37	25	30	308

Farm Tractor-Related Fatalities

Of the 113 fatalities involving farm tractors, tractor rollovers (overturns) were the most common, accounting for 61 (54.0%) of the tractor fatalities. Runovers/falls (being run over by the tractor, and/or falling from it) accounted for 43 (38.0%) of the tractor fatalities. Other tractor fatalities totaled nine (8.0%); several examples of such incidents include being pinned beneath a tractor that fell from a jack or other support, being pinned against the top of a low door or low-hanging obstacle while backing up, or being struck in a roadway collision that did not involve a rollover or runover, etc.

Tractor	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Rollovers	6	8	7	8	5	3	5	5	6	8	61
Runovers/Falls	6	3	8	4	5	7	0	4	1	5	43
Other	0	0	0	1	1	1	2	1	0	3	9
Total	12	11	15	13	11	11	7	10	7	16	113

Machine-Related Fatalities

Of the 80 fatalities involving farm machines other than tractors, incidents involving being pinned or entangled were the most common, accounting for nearly two-thirds of such deaths (52 fatalities, 65.0%). Being pinned by the machine accounted for 27 (33.8%), and entanglements 25 (31.2%), of the machine-related fatalities. Thirteen fatalities (16.2%) involved being run over by the machine, and 15 fatalities (18.8%) involved a variety of other incidents.

Machines	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
Pinned	3	4	3	2	4	3	2	4	0	2	27
Entanglement	7	5	3	3	2	0	2	2	1	0	25
Runovers	1	0	2	2	2	1	2	2	1	0	13
Other	0	1	0	0	4	1	1	4	3	1	15
Total	11	10	8	7	12	5	7	12	5	3	80

Animal-Related Fatalities

Animals were involved 37 (12.0%) of fatalities. Although type of animal was not always reported, attacks by bulls were the most common incident mentioned. Other animals reported included cows, heifers, and horses (non-recreational use).

Month of Occurrence

The month of occurrence is defined as the month when the injury occurred. Most farm-related fatalities involve death in seconds, minutes, or hours, but in some cases the time between injury and death may be longer.

Months with the greatest number of farm-related fatalities were those with the most field activity. Harvest in Wisconsin generally begins with hay baling or haylage chopping in June, running through the summer, with grain crops harvested in the fall. Peak months for fatalities generally corresponded with harvest months. Spring months involving land preparation and planting were similar.

Month	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
January	2	2	2	0	2	1	0	3	0	3	15
February	2	1	0	2	0	1	0	1	0	3	10
March	2	7	2	2	0	2	1	1	1	4	22
April	2	4	2	1	3	5	0	4	6	1	28
May	4	2	1	2	8	4	2	2	1	4	30
June	0	2	4	10	4	2	1	5	1	3	32
July	7	7	3	4	0	2	1	2	2	5	33
August	4	3	1	2	3	4	4	3	2	0	26
September	3	3	8	2	3	3	3	1	4	1	31
October	4	4	3	1	3	3	4	6	6	4	38
November	3	3	1	0	4	1	4	6	1	1	24
December	2	3	2	0	2	1	4	3	1	1	19

County of Occurrence

Farm-related fatalities were reported in 65 of Wisconsin's 72 counties. Some northern counties have little if any agriculture. Generally the fatalities were distributed widely across the state and many counties had several years without any fatalities. Counties with the highest numbers of fatalities tended to be counties known to have large numbers of farms or dairy herds, but this was not always the case.

County	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
Adams			1	1							2
Ashland	1										1
Barron					3				1		4
Bayfield								1			1
Brown			2	1	2			1			6
Buffalo	1		1	1	2	2	3				10
Burnett										2	2
Calumet					1	1					2
Chippewa	1	1		1	1					1	5
Clark		1		1	1		4	5	1	1	14
Columbia		1			1		1		2		5
Crawford					1		1	1		1	4
Dane	2	1	1		1			1		1	7
Dodge	1		1	1		1		1	1		6
Door		3		1	1	1					6
Douglas	1		1								2
Dunn	1	3		2	1	1		1		1	10
Eau Claire	2		1				1				4
Florence									1		1
Fond du Lac	1			1	1	1		2	1		7
Grant	1	1		2	1	3				2	10
Green	2	2	1			1		1	1	1	9

Wisconsin Farm-Related Fatalities, 1996-2005

County	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
Green Lake	1	1			1						3
Iowa		2					1			1	4
Jackson	1	1		1				1			4
Jefferson		1		1	1	1	1	3			8
Juneau					1			1		1	3
Kenosha			1							1	2
Kewaunee		1			1		2		1	2	7
La Crosse			1						2	2	5
Lafayette		2	1		2		2	1		1	9
Lincoln		1		1							2
Manitowoc	1		1		2			3		1	8
Marathon	1	3	2	1	1				2		10
Marinette				1		1		1			3
Marquette				1		1					2
Milwaukee										1	1
Monroe	1			1	1	1			3		7
Oconto	2		1	1						1	5
Outagamie	2	1				1	1				5
Ozaukee		1									1
Pepin			1					1	2		4
Pierce	1	1		1							3
Polk		2									2
Portage			1	1		1		1	1		5
Price	2								1		3
Racine								1		1	2
Richland	1				2	2		1		1	7
Rock		1				1	1	1			4
Rusk							1				1

County	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
St. Croix	2					1		1	1		5
Sauk			2	3		1	1	1		1	9
Sawyer					2						2
Shawano	1		2	1		1		1	1		7
Sheboygan		2									2
Taylor							1	1		1	3
Trempealeau		3				3	1				7
Vernon	3	1	1		1	1		2	1	1	11
Walworth	1		1								2
Washington						1	1				2
Waukesha			1						1		2
Waupaca	1		1							3	5
Waushara		2	1			1					4
Winnebago			1				1			1	3
Wood		2	1					1	1		5

Age of Victims

Age distribution of victims was done using standard National Safety Council age categories, with additional subdivisions for victims below age 25. The ages tend to be biased toward the extremes, either old or young, with fewer fatalities in the middle age categories. Almost a third of the victims (95 fatalities, 30.8%) were age 65 and older, and almost a fifth of the victims (57 fatalities, 18.5%) were age 19 or younger. In fact, almost a tenth of the victims (30 fatalities, 9.7%) were children under the age of 10.

Age	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
0 - 4	2	3	2	2	2	3	2	1	2	1	20
5 - 9	4	1	1	0	1	0	0	0	1	2	10
10 -14	0	2	1	2	1	0	4	4	0	0	14
15 -19	3	0	4	2	1	0	0	2	1	0	13
20 -24	0	1	0	2	0	0	1	0	2	2	8
25 -44	4	12	5	3	1	6	4	5	3	3	46
45 -64	14	10	8	9	14	10	7	12	11	7	102
65+	8	12	8	6	12	10	6	13	5	15	95
Total	35	41	29	26	32	29	24	37	25	30	308

Gender of Victims

Gender distribution clearly reflected the relatively greater number of workers who were male, as 93.8% of victims were male and only 6.2% of victims were female.

Gender	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Totals
Female	2	4	1	1	1	1	0	3	3	3	19
Male	33	37	28	25	31	28	24	34	22	27	289

Data Sources

Annual farm-related fatality summaries published by the University of Wisconsin Center for Agricultural Safety and Health, as accessed from the Center's website: <http://www.wiscash.uwex.edu/Index.htm>

Annual editions of the National Safety Council *Injury Facts*

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